0590-0420 Page 1 of 7

OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/023,929

DATE: 02/10/2002

TIME: 14:53:36

Input Set : N:\Crf3\RULE60\10023929.txt
Output Set: N:\CRF3\02102002\J023929.raw

## SEQUENCE LISTING

5 (1) GENERAL INFORMATION: (i) APPLICANT: Hillman, Jennifer L. Goli, Surya K. (ii) TITLE OF INVENTION: NOVEL HUMAN MLS3 PROTEIN C--> 10 (iii) NUMBER OF SEQUENCES: 6 13 15 (iv) CORRESPONDENCE ADDRESS: 16 (A) ADDRESSEE: Incyte Pharmaceuticals, Inc. 17 (B) STREET: 3174 Porter Drive 18 (C) CITY: Palo Alto 19 (D) STATE: CA ENTERED 20 (E) COUNTRY: USA (F) ZIP: 94304 21 (V) COMPUTER READABLE FORM: 23 (A) MEDIUM TYPE: Diskette 24 25 (B) COMPUTER: IBM Compatible 26 (C) OPERATING SYSTEM: DOS 27 (D) SOFTWARE: FastSEQ for Windows Version 2.0 (vi) CURRENT APPLICATION DATA: 34 C--> 35 (A) APPLICATION NUMBER: US/10/023,929 C--> 36 (B) FILING DATE: 17-Dec-2001 37 (C) CLASSIFICATION: 40 (vii) PRIOR APPLICATION DATA: 41 (A) APPLICATION NUMBER: 08/805,965 42 (B) FILING DATE: 44 (viii) ATTORNEY/AGENT INFORMATION: (A) NAME: Billings, Lucy J. 45 46 (B) REGISTRATION NUMBER: 36,749 47 (C) REFERENCE/DOCKET NUMBER: PF-0223 US 49 (ix) TELECOMMUNICATION INFORMATION: 50 (A) TELEPHONE: 415-855-0555 (B) TELEFAX: 415-845-4166 51 52 (C) TELEX: (2) INFORMATION FOR SEQ ID NO: 1: 57 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 262 amino acids 58

(B) TYPE: amino acid

(D) TOPOLOGY: linear

(B) CLONE: 762280

(A) LIBRARY: BRAITUT02

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

(vii) IMMEDIATE SOURCE:

(C) STRANDEDNESS: single

RECEIVED
FEB 2.1 2002
TECH CENTER 1600/2900

59

60

61

63

64 65

67

RAW SEQUENCE LISTING DATE: 02/10/2002 PATENT APPLICATION: US/10/023,929 TIME: 14:53:36

```
69 Met Phe Arg Phe Met Arg Asp Val Glu Pro Glu Asp Pro Met Phe Leu
    70
                                             10
    71
        Met Asp Pro Phe Ala Ile His Arg Gln His Met Ser Arg Met Leu Ser
    72
                    20
                                         25
    73
        Gly Gly Phe Gly Tyr Ser Pro Phe Leu Ser Ile Thr Asp Gly Asn Met
    74
    75
        Pro Gly Thr Arg Ala Ala Ser Arg Arg Met Gln Gln Ala Gly Ala Val
    76
  -> 77
        Xaa Pro Phe Gly Xaa Leu Gly Met Ser Gly Gly Phe Met Asp Met Phe
    78
                                                 75
W--> 79
        Gly Met Met Asn Asp Met Xaa Gly Asn Met Glu His Met Thr Ala Gly
    80
                         85
        Gly Asn Cys Gln Thr Phe Ser Ser Ser Thr Val Ile Ser Tyr Ser Asn
    81
    82
                                         105
                                                             110
    83
        Thr Gly Asp Gly Ala Pro Lys Val Tyr Gln Glu Thr Ser Glu Met Arg
    84
                                     120
                                                         125
        Ser Ala Pro Gly Gly Ile Arg Glu Thr Arg Arg Thr Val Arg Asp Ser
    85
    86
                                 135
                                                     140
        Asp Ser Gly Leu Glu Gln Met Ser Ile Gly His His Ile Arg Asp Arg
    87
    88
                             150
        Ala His Ile Leu Gln Arg Ser Arg Asn His Arg Thr Gly Asp Gln Glu
    89
    90
                                             170
       Glu Arg Gln Asp Tyr Ile Asn Leu Asp Glu Ser Glu Ala Ala Phe
    91
    92
                    180
                                         185
        Asp Asp Glu Trp Arg Arg Glu Thr Ser Arg Phe Arg Gln Gln Arg Pro
    93
    94
                                     200
    95
        Leu Glu Phe Arg Arg Leu Glu Ser Ser Gly Ala Gly Gly Arg Arg Ala
    96
                                 215
    97
        Glu Gly Pro Pro Arg Leu Ala Ile Gln Gly Pro Glu Asp Ser Leu Pro
    98
                            230
                                                 235
    99
        Asp Ser Pro Ala Ala Met Thr Gly Glu Gly Pro Gly Ala Ser Ala Leu
    100
                         245
    101
         Leu Tyr Arg Leu Arg Gly
    102
                     260
    104 (2) INFORMATION FOR SEQ ID NO: 2:
            (i) SEQUENCE CHARACTERISTICS:
    106
    107
                  (A) LENGTH: 1322 base pairs
    108
                  (B) TYPE: nucleic acid
    109
                  (C) STRANDEDNESS: single
                  (D) TOPOLOGY: linear
    110
    112
           (vii) IMMEDIATE SOURCE:
    113
                  (A) LIBRARY: BRAITUT02
    114
                  (B) CLONE: 762280
    116
           (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
    118 GGGGGGCGTA CGGAGGTGGC AGCTGTGGGA GGAGGCGGCG TGGAAGGCCG AGGAGCTCAA
                                                                                 60
         GCCCGGACCA ATCCCCACGT TCCGGGCCGC CACCCTGACC CTGCAGCGTA CCGGGAAGCG
                                                                               120
         AAACCGGCCG GATGGGCCGC TGAGCCCGAA TCGGGCACTG TGTGGAGCCC CCTGGAGCTG
    120
                                                                               180
         AGATCAGGAT GTTCCGCTTC ATGAGGGACG TGGAGCCTGA GGATCCCATG TTCCTGATGG
    121
                                                                               240
         ATCCCTTTGC TATTCACCGT CAGCATATGA GCCGTATGTT GTCAGGTGGC TTTGGATATA
```

RAW SEQUENCE LISTING DATE: 02/10/2002 PATENT APPLICATION: US/10/023,929 TIME: 14:53:36

```
GCCCCTTCCT CAGCATCACA GATGGCAACA TGCCAGGGAC CAGGGCTGCC AGCCGCCGGA
                                                                           360
     TGCAGCAGGC TGGAGCTGTC TNCCCCTTTG GGNTGCTGGG AATGTCGGGT GGTTTCATGG
                                                                           420
125
     ACATGTTTGG GATGATGAAT GACATGNTTG GAAACATGGA ACACATGACA GCTGGAGGCA
                                                                           480
126
     ATTGCCAGAC CTTCTCATCT TCCACTGTCA TCTCCTACTC CAATACGGGT GATGGTGCCC
127
     CCAAGGTCTA CCAAGAGACA TCAGAGATGC GCTCGGCACC AGGCGGGATC CGGGAGACAC
128 GGAGGACTGT TCGGGATTCA GACAGTGGAC TGGAGCAGAT GTCCATTGGG CATCACATCC
                                                                           660
129 GGGACAGGGC TCACATCCTC CAGCGCTCCC GAAACCATCG CACGGGGGAC CAGGAGGAGC
                                                                           720
130 GGCAGGACTA TATCAACCTG GATGAGAGTG AGGCCGCAGC GTTTGATGAC GAGTGGCGGC
                                                                           780
131 GGGAGACCTC CCGATTCCGG CAGCAGCGTC CCCTGGAGTT TCGGCGGCTT GAGTCCTCAG
                                                                           840
132 GGGCTGGGGG ACGAAGGGCG GAGGGGCCTC CCCGCCTGGC CATCCAGGGA CCTGAGGACT
                                                                           900
133
     CCCTTCCCGA CAGTCCCGCC GCTATGACTG GTGAGGGCCC CGGGGCCTCA GCTCTCTTGT
                                                                           960
134
     ACAGGCTGAG AGGCTGAGAA ATCATCCCCT GAATAACTTT TTCCTCTCGA TTCCCATCCC
                                                                          1020
135 CAATTTAATA TTAAATTAAC AGGCAAGCCG GCCCCCACCT CTCCCTGGGG GTCTCAGGGA
                                                                          1080
136 GAACCTTTCA CGGCACCCTT TCCCTACCTT TTCCTTCTTT AATCTCCTGG TTTACCATTG
                                                                          1140
137 ATGACTTCGG CTCTGCATCT ACTTACTTGA TTTTTCATTC TGCCACTTCA TCTTCAAACC
                                                                          1200
138 CCCTCACCTT TCCCATCCTA CTCCTGCCAT GCATTGAAGG GTCAATGCAT TTTGGGGTGA
                                                                          1260
139 GNTTNGGTTT AGGGGCCCCT TCATNCCTNA GCTACCTGGG TCTTTGCCCA ACTTTTCTCA
                                                                          1320
140 GA
                                                                          1322
142 (2) INFORMATION FOR SEQ ID NO: 3:
        (i) SEQUENCE CHARACTERISTICS:
145
              (A) LENGTH: 268 amino acids
146
              (B) TYPE: amino acid
147
              (C) STRANDEDNESS: single
148
              (D) TOPOLOGY: linear
150
     (vii) IMMEDIATE SOURCE:
151
              (A) LIBRARY: GenBank
152
              (B) CLONE: 1066392
154
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
156
     Met Phe Arg Met Leu Asn Ser Ser Phe Glu Asp Asp Pro Phe Phe Ser
157
                                         10
158
     Glu Ser Ile Leu Ala His Arg Glu Asn Met Arg Gln Met Ile Arg Ser
159
                 20
                                     25
160
     Phe Ser Glu Pro Phe Gly Arg Asp Leu Leu Ser Ile Ser Asp Gly Arg
161
                                 40
162
     Gly Arg Ala His Asn Arg Arg Gly His Asn Asp Gly Glu Asp Ser Leu
163
                             55
164
     Thr His Thr Asp Val Ser Ser Phe Gln Thr Met Asp Gln Met Val Ser
165
                         70
                                             75
166
     Asn Met Arg Asn Tyr Met Gln Lys Leu Glu Arg Asn Phe Gly Gln Leu
167
168
     Ser Val Asp Pro Asn Gly His Ser Phe Cys Ser Ser Ser Val Met Thr
169
                 100
                                     105
170
     Tyr Ser Lys Ile Gly Asp Glu Pro Pro Lys Val Phe Gln Ala Ser Thr
171
             115
                                 120
172
     Gln Thr Arg Arg Ala Pro Gly Gly Ile Lys Glu Thr Arg Lys Ala Met
                             135
                                                 140
174
     Arg Asp Ser Asp Ser Gly Leu Glu Lys Met Ala Ile Gly His His Ile
175
                         150
                                             155
176
    His Asp Arg Ala His Val Ile Lys Lys Ser Lys Asn Lys Lys Thr Gly
```

RAW SEQUENCE LISTING DATE: 02/10/2002 PATENT APPLICATION: US/10/023,929 TIME: 14:53:36

```
177
                     165
                                          170
                                                               175
178
     Asp Glu Glu Val Asn Gln Glu Phe Ile Asn Met Asn Glu Ser Asp Ala
179
                 180
                                      185
     His Ala Phe Asp Glu Glu Trp Gln Ser Glu Val Leu Lys Tyr Lys Pro
180
181
             195
                                  200
                                                      205
182
     Gly Arg His Asn Leu Gly Asn Thr Arg Met Arg Ser Val Gly His Glu
183
                              215
184
     Asn Pro Gly Ser Arg Glu Leu Lys Arg Arg Glu Lys Pro Gln Gln Ser
185
                         230
                                              235
186
     Pro Ala Ile Glu His Gly Arg Arg Ser Asn Val Leu Gly Asp Lys Leu
187
                                          250
                     245
188
     His Ile Lys Gly Ser Ser Val Lys Ser Asn Lys Lys
189
                 260
                                      265
191 (2) INFORMATION FOR SEQ ID NO: 4:
        (i) SEQUENCE CHARACTERISTICS:
194
              (A) LENGTH: 1116 base pairs
195
              (B) TYPE: nucleic acid
196
              (C) STRANDEDNESS: single
197
              (D) TOPOLOGY: linear
199
       (vii) IMMEDIATE SOURCE:
200
              (A) LIBRARY: GenBank
201
              (B) CLONE: 1066391
203
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
205
    GTTATGTGTT CCCGTCCGTA CTGGAGGCTA GCTCTTGTCG CGGCCGCGGC GAGTTAACAT
                                                                             60
     CGTTTTTCCA ATCTGTCCGC GGCTGCCGCC ACCCAAGACA GAGCCAGAAT GTTCAGGATG
206
                                                                            120
207
     CTGAACAGCA GTTTTGAGGA TGACCCCTTC TTCTCTGAGT CCATTCTTGC ACACCGAGAA
                                                                            180
208
     AATATGCGAC AGATGATAAG AAGTTTTTCT GAACCCTTTG GAAGAGACTT GCTCAGTATC
                                                                            240
209
     TCTGATGGTA GAGGGAGAGC TCATAATCGT AGAGGACATA ATGATGGTGA AGATTCTTTG
                                                                            300
210
    ACTCATACAG ATGTCAGCTC TTTCCAGACC ATGGACCAAA TGGTGTCAAA TATGAGAAAC
                                                                            360
211
    TATATGCAGA AATTAGAAAG AAACTTCGGT CAACTTTCAG TGGATCCAAA TGGACATTCA
212
    TTTTGTTCTT CCTCAGTTAT GACTTATTCC AAAATAGGAG ATGAACCGCC AAAGGTTTTT
                                                                            480
    CAGGCCTCAA CTCAAACTCG TCGAGCTCCA GGAGGAATAA AGGAAACCAG GAAAGCAATG
213
                                                                            540
    AGAGATTCTG ACAGTGGACT AGAAAAAATG GCTATTGGTC ATCATATCCA TGACCGAGCT
214
                                                                            600
215
    CATGTCATTA AAAAGTCAAA GAACAAGAAG ACTGGAGATG AAGAGGTCAA CCAGGAGTTC
                                                                            660
216
    ATCAATATGA ATGAAAGCGA TGCTCATGCT TTTGATGAGG AGTGGCAAAG TGAGGTTTTG
                                                                            720
217
    AAGTACAAAC CAGGACGACA CAATCTAGGA AACACTAGAA TGAGAAGTGT TGGCCATGAG
                                                                            780
    AATCCTGGCT CCCGAGAACT TAAAAGAAGG GAGAAACCTC AACAAAGTCC AGCCATTGAA
218
219
    CATGGAAGGA GATCAAATGT TTTGGGGGAC AAACTCCACA TCAAAGGCTC ATCTGTGAAA
    AGCAACAAAA AATAAATAGC CATGCATTTG ATTTGTTTAG TTTTGATTGT TTTAACAGTT
221
    AGTAATGGTG CTGGGTAATA AGCATAAGAC CAATCTCTTG CTGTTAAATC AGTTCTGTCC
                                                                           1020
222
    TTGGCAACTT TCTTCTGATA TCTGAATGTT CATGAAGGTC CTAGCTTTAT ATTGTCCCTC
                                                                           1080
    TTTTAGGAAT AAAATTTTGA TTTTCAACAA AAAAAA
                                                                           1116
225 (2) INFORMATION FOR SEQ ID NO: 5:
227
         (i) SEQUENCE CHARACTERISTICS:
228
              (A) LENGTH: 248 amino acids
229
              (B) TYPE: amino acid
230
              (C) STRANDEDNESS: single
231
              (D) TOPOLOGY: linear
233
       (vii) IMMEDIATE SOURCE:
```

RAW SEQUENCE LISTING DATE: 02/10/2002 PATENT APPLICATION: US/10/023,929 TIME: 14:53:36

234 (A) LIBRARY: GenBank																	
235		(B) CLONE: 1399745 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:															
237		(xi)	SEQ	UENC:	E DE	SCRI	PTIO	N: S	EQ I	D NO	: 5:						
239							Asp					Asp	Pro	Met	Phe	Leu	
240	1				5					10		_			15		
241	Met	Asp	Pro	Phe	Ala	Ile	His	Arg	Gln	His	Met	Ser	Arq	Met	Leu	Ser	
242				20				_	25				_	30			
243	Gly	Gly	Phe	Gly	Tyr	Ser	Pro	Phe	Leu	Ser	Ile	Thr	Asp	Glv	Asn	Met	
244			35		_			40					45	-			
245	Pro	Gly	Thr	Arg	Pro	Ala	Ser	Arg	Arg	Met	Gln	Gln	Ala	Gly	Ala	Val	
246		50					55					60		_			
247	Ser	Pro	Phe	Gly	Met	Leu	Gly	Met	Ser	Gly	Gly	Phe	Met	Asp	Met	Phe	
248	6,5					70				_	75			-		80	
249	Gly	Met	Met	Asn	Asp	Met	Ile	Gly	Asn	Met	Glu	His	Met	Thr	Ala	Gly	
250					85					90					95	1	
251	Gly	Asn	Cys	Gln	Thr	Phe	Ser	Ser	Ser	Thr	Val	Ile	Ser	Tyr	Ser	Asn	
252				100					105					110			
253	Thr	Gly	Asp	Gly	Ala	Pro	Lys	Val	Tyr	Gln	Glu	Thr	Ser	Glu	Met	Ara	
254			115				_	120	-				125			3	
255	Ser	Ala	Pro	Gly	Gly	Ile	Arg	Glu	Thr	Arg	Arg	Thr	Val	Arq	Asp	Ser	
256		130					135			_	_	140		_	-		
257	Asp	Ser	Gly	Leu	Glu	Gln	Met	Ser	Ile	Gly	His	His	Ile	Arg	Asp	Arq	
258	145					150					155			-	-	160	
259	Ala	His	Ile	Leu	Gln	Arg	Ser	Arg	Asn	His	Arg	Thr	Gly	Asp	Gln	Glu	
260					165					170	_		-	-	175		
261	Glu	Arg	Gln	Asp	Tyr	Ile	Asn	Leu	Asp	Glu	Ser	Glu	Ala	Ala	Ala	Phe	
262				180					185					190			
263	Asp	Asp	Glu	Trp	Arg	Arg	Glu	Thr	Ser	Arg	Phe	Arg	Gln	Gln	Arg	Pro	
264			195					200					205				
265	Leu	Glu	Phe	Arg	Arg	Leu	Glu	Ser	Ser	Gly	Ala	Gly	Gly	Arg	Arg	Ala	
266		210					215					220	_	_	_		
267	Glu	Gly	Pro	Pro	Arg	Leu	Ala	Ile	Gln	Gly	Pro	Glu	Asp	Ser	Pro	Ser	
268	225					230					235					240	
269	Arg	Gln	Ser	Arg	Arg	Tyr	Asp	Trp									
270					245												
	(2)																
274		(i)	SEQU	ENCE	CHA	RACI	CERIS	STICS	5:								
275			(A)	LEN	IGTH:	150	)2 ba	se p	pairs	;							
276							eic a										
277			(C)	STF	RANDE	DNE	SS: s	ingl	.e								
278			(D)	TOP	OLOG	Y: ]	inea	ır									
280	7)	7ii)	IMME	rAID:	E SC	URCE	Ξ:										
281			(A)	LIE	RARY	: G∈	enBan	ık									
282		(B) CLONE: 1399744															
284							MOIT										
286	CTCI	'AAAG	GG C	AGCI	GTGG	G AG	GAGG	CGGC	GTG	GAAG	GCC	GAGG	AGCI	CA A	GCCC	GGACC	60
287	AATC	CCCA	.CG I	TCCG	GGCC	G CG	ACCC	TGAC	CCI	GCAG	CGT	ACCG	GGAA	GC G	SAAAC	CGGCC	120
288	GGATGGGCCG CTGAGCCCGA ATCGGGCACT GTGTGGAGCC CCCTGGAGCT GAGATCAGGA													180			
289	TGTTCCGCTT CATGAGGGAC GTGGAGCCTG AGGATCCCAT GT										GTTC	CTGA	TG C	ATCC	CTTTG	240	

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/023,929

DATE: 02/10/2002 TIME: 14:53:37

Input Set : N:\Crf3\RULE60\10023929.txt
Output Set: N:\CRF3\02102002\J023929.raw

L:5 M:220 C: Keyword misspelled or invalid format, [(1) GENERAL INFORMATION:]
L:10 M:220 C: Keyword misspelled or invalid format, [(ii) TITLE OF INVENTION:]
L:30 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:31 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:35 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:36 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:77 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:79 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1